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|  **UNIVERSITY OF NIŠ** |
| **Course Unit Descriptor** | **Faculty**  | TECHNOLOGY |
| **GENERAL INFORMATION** |
| Study program  | TECHNOLOGICAL ENGINEERING |
| Study Module (if applicable) | Food Engineering, Ecological Engineering |
| Course title | Membrane separation processes |
| Level of study | [x] Bachelor [ ]  Master’s [ ]  Doctoral |
| Type of course | [ ]  Obligatory [x]  Elective |
| Semester  |  [x]  Autumn (FE) [x] Spring (EE) |
| Year of study  | 4 |
| Number of ECTS allocated | 6 |
| Name of lecturer/lecturers | Stanisa Stojiljkovic |
| Teaching mode |  [x] Lectures [ ] Group tutorials [ ]  Individual tutorials [ ] Laboratory work [ ]  Project work [x]  Seminar [ ] Distance learning [ ]  Blended learning [x]  Other |
| **PURPOSE AND OVERVIEW (max. 5 sentences)** |
| *Mastering the process of transfer phenomena of matter and energy through the membrane. The design of the membrane. Biomembranes as a useful basis for carrying industrial membrane. To enable students to implement these processes in biotechnology.* |
| **SYLLABUS (brief outline and summary of topics, max. 10 sentences)** |
| **Introduction to the membrane. Physics membrane. The membrane of the cell. Active and passive transport through the membrane. Membrane processes in food and pharmaceutical industry. Membrane processes and nanotechnology. Membrane in the building. Ecological processes and membrane.** |
| **LANGUAGE OF INSTRUCTION** |
| [x] Serbian (complete course) [ ]  English (complete course) [ ]  Other \_\_\_\_\_\_\_\_\_\_\_\_\_ (complete course)[ ] Serbian with English mentoring [ ] Serbian with other mentoring \_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| **ASSESSMENT METHODS AND CRITERIA** |
| **Pre exam duties** | **Points** | **Final exam** | **points** |
| **Activity during lectures** | **10** | **Written examination** | **30** |
| **Practical teaching** | **10** | **Oral examination** | **20** |
| **Teaching colloquia** | **30** | **OVERALL SUM** | **100** |
| **\*Final examination mark is formed in accordance with the Institutional documents** |